ifW

JUN 2 8 2004 23

Docket: MA9658DIV5

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Fraser et al.

Group Art Unit: 1632

Serial No: 10/614,643

Filed:

July 7, 2003

Examiner: unknown

FOR: SYSTEMS AND METHODS FOR

TREATING PATIENTS WITH

PROCESSED LIPOASPIRATE CELLS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 I hereby certify that this correspondence is being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 23, 2004. STOUT, UXA, BUYAN & MULLINS, LLP

#

Kenton R. Mullins, Reg. No. 36,331

TRANSMITTAL

Sir:

Submitted herewith are

- ~ Return Receipt postcard;
- ~ Information Disclosure Statement;
- ~ PTO-1449 21 Sheets;
- ~ The Commissioner is hereby authorized to charge any needed fees to deposit account 50-1600.

Respectfully submitted,

Kenton R. Mullins Attorney for Applicants Reg. No. 36,331

June 23, 2004 4 Venture, Suite 300 Irvine, CA 92618

Telephone: (949) 450-1750 Facsimile: (949) 450-1764

Docket: MA9658DIV5

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Fraser et al.

Group Art Unit: 1632

Serial No: 10/614,643

/ Group Art Unit: 1032

Filed: July 7, 2003

Examiner: unknown

FOR: SYSTEMS AND METHODS FOR

TREATING PATIENTS WITH

PROCESSED LIPOASPIRATE CELLS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 I hereby certify that this correspondence is being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 23, 2004.

STOUT, UXA, BUYAN & MULLINS, LLP

Kenton R. Mullins, Reg. No. 36,331

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. 1.56 and 1.97, Applicants wish to call the attention of the Examiner to the references that are listed on the attached PTO form 1449. In accordance with 37 .F.R. section 198(d)(1)(2), copies of all 291 references in the enclosed PTO form 1449 are not provided as they have previously been provided in U.S. Serial No. 10/316,127 filed December 9, 2002, for which the subject application claims priority

Applicants respectfully request that the cited references be listed on the face of any patent issuing from this application.

These citations do not constitute an admission that the references are relevant or material to the claims, but rather only constitute the closest art of which Applicants are presently aware.

Respectfully Submitted

Kenton R. Mullins Attorney for Applicants Registration No. 36,331

June 23, 2004 4 Venture, Suite 300 Irvine, CA 92618 949-450-1750

					Docket Number (Optional) MA9658D V 5 Application Number 10/614,				2
INFORMATION DISCLOSURE CITATION					Applicant(s)				
(Use several sheets if necessary)					Fraser et al. Filing Date Group Art Unit				
 			UN 2 8 2004 💍	<u> </u>	7/7/03		Group Art Unit	2	
U.S. PATENT DOCUMENTS									
EXAMINER INITIAL	REF	DOCUMENT NUMBER	RACEATE		NAME	CLASS	SUBCLASS	FILING IF APPRO	
		6,200,606	03/13/2001	Peterso	n et al.				
		5,035,708	07/20/1991	Alchas o	et al.				
		5,372,945	12/13/1994	Alchas e	et al.				
		5,786,207	07/28/1998	Katz et	al.				
		4,820,626	04/11/1989	William	s et al.				
		4,883,755	11/28/1989	Carabas	si et al.				
		5,486,359	01/23/1996	Caplan	et al.				
		4,458,678	07/10/1984	Yannas	et al.				
		5,837,235	11/17/1998	Mueller	et al.		·		
		5,409,833	04/25/1995	Hu et al					
		6,316,247	11/13/2001	Katz et	al.				
				FOREIGN	PATENT DOCUMENTS				
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Transl	ation NO
		EP0570331	11/18/1993	Europe					
		WO8702812	07/11/1987	WIPO					
		WO8601111	02/27/1986	WIPO					-
				OTHER D	OCUMENTS (Including A	uthor, Title, I	Date, Pertinent Pa	ges, Etc.)	
		U.S. Application No. 09/	936,665, filed 9/1	0/2001, Ka	tz et al., Adipose-Derived S	Stem Cells 2	and Lattices		
	U.S. Application No. 09/952,522, filed 9/10/2001, Katz et al., Adipose-Derived Stem Cells and Lattices								
XAMINER	 \				DATE CONSIDERED				
		al if citation considered, whether c clude copy of this form with next o			e with MPEP Section 609; Dr	aw line throu	ugh citation if not	in conforma	nce and

Form PTO-A820 (also form PTO-1449)

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) MA9658D\V	Application Number 10/614,643
Applicant(s) Fraser et al.	100014,043
Filing Date 7/7/03	Group Art Unit

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
	Avital, I., D. Inderbitzin, et al. (2001). "Isolation, characterization, and transplantation of bone marrow-derived hepatocyte stem cells." Biochem Biophys Res Commun 288(1): 156-64.					
•	Carmeliet, P. and A. Luttun (2001). "The emerging role of the bone marrow-derived stem cells in (therapeutic) angiogenesis." Thromb Haemost 86(1): 289-97.					
	Castro-Malaspina, H., W. Ebell, et al. (1984). "Human bone marrow fibroblast colony-forming units (CFU-F)." Prog Clin Bio Res 154: 209-36.					
	Coleman, S. R. (1995). "Long-term survival of fat transplants: controlled demonstrations." Aesthetic Plast Surg 19(5): 421-5.					
	Coleman, S. R. (2001). "Structural fat grafts: the ideal filler?" Clin Plast Surg 28(1): 111-9.					
	Coleman, W. P., 3rd (1991). "Autologous fat transplantation." Plast Reconstr Surg 88(4): 736.					
	Connolly, J. F. (1998). "Clinical use of marrow osteoprogenitor cells to stimulate osteogenesis." Clin Orthop(355 Suppl): S257-66.					
	Eremia, S. and N. Newman (2000). "Long-term follow-up after autologous fat grafting: analysis of results from 116 patients followed at least 12 months after receiving the last of a minimum of two treatments." Dermatol Surg 26(12): 1150-8.					
	Fukuda, K. (2001). "Development of regenerative cardiomyocytes from mesenchymal stem cells for cardiovascular tissue engineering." Artif Organs 25(3): 187-93.					
	Guerrerosantos, J., A. Gonzalez-Mendoza, et al. (1996). "Long-term survival of free fat grafts in muscle: an experimental study in rats." Aesthetic Plast Surg 20(5): 403-8.					
	Horwitz, E. M., D. J. Prockop, et al. (1999). "Transplantability and therapeutic effects of bone marrow-derived mesenchymal cells in children with osteogenesis imperfecta." Nat Med 5(3): 309-13.					
	Horwitz, E. M., D. J. Prockop, et al. (2001). "Clinical responses to bone marrow transplantation in children with severe osteogenesis imperfecta." Blood 97(5): 1227-31.					
EXAMINER	DATE CONSIDERED					

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

		Docket Number (Optional)	Application Number
INFO	THE ATTION DIGGS COURT OF ATTION	MA96580\U≤	10/6/4,643
. INFO	PRMATION DISCLOSURE CITATION (Use several sheets if necessary)	Applicant(s) Fraser et al.	
		Filing Date 7/7/03	Group Art Unit 1612
.*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author,		
	Huang, J. I., S. R. Beanes, et al. (2002). "Rat ext Plast Reconstr Surg 109(3): 1033-41; discussion	tramedullary adipose tissue as a source of 1042-3.	of osteochondrogenic progenitor cells."
	Hutley, L. J., A. C. Herington, et al. (2001). "Hu J Physiol Endocrinol Metab 281(5): E1037-44.	ıman adipose tissue endothelial cells pro	mote preadipocyte proliferation." Am
·	Kern, P. A., A. Knedler, et al. (1983). "Isolation Invest 71(6): 1822-9.	and culture of microvascular endotheliu	ım from human adipose tissue." J Clin
	Lee, J. H., Z. Ilic, et al. (1996). "Cell kinetics of r 77(2): 63-72.	repair after allyl alcohol-induced liver n	ecrosis in mice." Int J Exp Pathol
	Lee, P. E., R. C. Kung, et al. (2001). "Periurethr. a randomized double-blind controlled trial." J U	al autologous fat injection as treatment Jrol 165(1): 153-8.	for female stress urinary incontinence:
	Mizuno, H., P. A. Zuk, et 21. (2002). "Myogenic of 109(1): 199-209; discussion 210-1.	differentiation by human processed lipo:	aspirate cells." Plast Reconstr Surg
	Murayama, T., O. M. Tepper, et al. (2002). "Det angiogenic growth factor-induced neovasculariza	ermination of bone marrow-derived end ation in vivo." Exp Hematol 30(8): 967-7	lothelial progenitor cell significance in 72.
	Murry, C. E., R. W. Wiseman, et al. (1996). "Ske Invest 98(11): 2512-23.	eletal myoblast transplantation for repai	ir of myocardial necrosis." J Clin
	Muschler, G. F., H. Nitto, et al. (2001). "Age- and prevalence of osteoblastic progenitors." J Orthop	d gender-related changes in the cellulari p Res 19(1): 117-25.	ity of human bone marrow and the
	Nishimori, M., Y. Yamada, et al. (2002). "Health 99(6): 1995-2001.	ı-related quality of life of unrelated bone	: marrow donors in Japan." Blood
	Orlic, D., J. Kajstura, et al. (2001). "Transplante Acad Sci 938: 221-9; discussion 229-30.	ed adult bone marrow cells repair myoca	ardial infarcts in mice." Ann N Y
	Orlic, D., J. Kajstura, et al. (2001). "Bone marro	ow cells regenerate infarcted myocardium	n." Nature 410(6829): 701-5.
EXAMINER		DATE CONSIDERED	

P098/REV04

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and

not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

not considered. Include copy of this form with next communication to applicant.

(Use several sheets if necessary)

Docket Number (Optional) MA9658D1U	Application Number 10/614, 443
Applicant(s) Fraser et al.	
Filing Date 7/7/03	Group Art Unit

. *EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
-	Palma, P. C., C. L. Riccetto, et al. (1997). "Repeated lipoinjections for stress urinary incontinence." J Endourol 11(1): 67-70.					
	Pittenger, M. F., A. M. Mackay, et al. (1999). "Multilineage potential of adult human mesenchymal stem cells." Science 284(5411): 143-7.					
	Prockop, D. J., S. A. Azizi, et al. (2000). "Potential use of marrow stromal cells as therapeutic vectors for diseases of the central nervous system." Prog Brain Res 128: 293-7.					
	Rajnoch, C., J. C. Chachques, et al. (2001). "Cellular therapy reverses myocardial dysfunction." J Thorac Cardiovasc Surg 121(5): 871-8. t&artType=abs&id=a112937⌖=.					
	Shi, Q., S. Rafii, et al. (1998). "Evidence for circulating bone marrow-derived endothelial cells." Blood 92(2): 362-7.					
	Strauer, B. E., M. Brehm, et al. (2002). "Repair of infarcted myocardium by autologous intracoronary mononuclear bone marrow cell transplantation in humans." Circulation 106(15): 1913-8.					
	Takahashi, T., C. Kalka, et al. (1999). "Ischemia- and cytokine-induced mobilization of bone marrow-derived endothelial progenitor cells for neovascularization." Nat Med 5(4): 434-8.					
	Thomas, E. D. (1994). "Stem Cell Transplantation: Past, Present and Future." Stem Cells 12: 539-544.					
	Werlich, T., K. J. Stiller, et al. (1999). "Experimental studies on the stem cell concept of liver regeneration. II." Exp Toxicol Pathol 51(1): 93-8.					
-	Yavorkovsky, L., E. Lai, et al. (1995). "Participation of small intraportal stem cells in the restitutive response of the liver to periportal necrosis induced by allyl alcohol." Hepatology 21(6): 1702-12.					
	Yin, L., D. Lynch, et al. (1999). "Participation of different cell types in the restitutive response of the rat liver to periportal injury induced by allyl alcohol." J Hepatol 31(3): 497-507.					
	Zuk, P. A., M. Zhu, et al. (2001). "Multilineage cells from human adipose tissue: implications for cell- based therapies." Tissue Eng 7(2): 211-28.					
EXAMINER	DATE CONSIDERED					
EXAMINER: In	itial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and					

P09B/REV04

FORM 1449*	MA9658 DIV C 10/6/4, 643			
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.			
(Use several sheets if necessary)	Filing Date 7/7/0 3	Group Art Unit		

		U.S. PA	ATENT DOCUMENT	S			
EXAMINER INITIAL	EXAMINER DOCUMENT NO. DATE NAME CLASS SUBCLASS					FILING DATE IF APPROPRIATE	
	5,486,359	January 23, 1996 (EXHIBIT 1)	Caplan, et al.				
	5,728,739	March 17, 1998 (EXHIBIT 2)	Ailhaud et al.				
-	5,827,740	October 27, 1998 (EXHIBIT 3)	Pittenger				
,	5,827,897	October 27, 1998 (EXHIBIT 4)	Ailhaud, et al.				
		FOREIGN	PATENT DOCUME	NTS			
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRAN	SLATION
						YES	NO
	WO 98/04682	February 5, 1998 (EXHIBIT 5)	US				
	OTHE	R DOCUMENTS (Includ	ing Author Title Date	e Pertinent Pag	es. Etc.)	L	
	Considine, et al., "Paracrine stimulation of preadipocyte-enriched cell cultures by mature adip American Journal of Physiology 1996 270(5) E895-E899 (EXHIBIT 6) Dani, et al., "Differentiation of embryonic stem cells into adipocytes in vitro," J. Cell Sci. 199 1279-1285 (EXHIBIT 7) Entenmann, et al., "Relationship between replication and differentiation cultured human adip precursor cells," American Phys. Soc. 1996 270, C1011-C1016 (EXHIBIT 8) Eslami Varzaneh, et al., "Extracellular Matrix Components Secreted by Microvascular Endot Stimulate Preadipocyte Differentiation In Vitro," Metabolism 1994 43 (7), 906-912 (EXHIBIT Hauner, et al., "Endothelin-1 Inhibits the Adipose Differentiation of Cultured Human Adipocy Precursor Cells," Metabolism 1994 43(2) pp 227-232 (EXHIBIT 10) Hausman, et al., "The Influence of Extracellular Matrix Substrata on Preadipocyte Developm Serum-Free Cultures of Stromal-Vascular Cells," J. Anim. Sci. 1996 74(9), 2117-2128 (EXHIBIT 12) Hui-Ling et al., "Increased expression of G in mouse embryo stem cells promotes terminal differentiation to adipocytes," American Physiological Society 1993 265(6), C1729-C1735 (EXHIBIT 12) Marko, et al., "Isolation of a Preadipocyte Cell Line from Rat Bone Marrow and Differentiat Adipocytes," Endocrinology 1995 136(10), 4582-4588 (EXHIBIT 13) Shillabeer, et al., "A novel method for studying preadipocyte differentiation in vitro," Intl. J. 1996 20(Supp. 3), S77-S83 (EXHIBIT 14)					man adiportal and Adiportal Adiporta	nelial Cells T 9) yte ent in BIT 11) On to
	Cell S	sy et al., "From preadipo Surface to the Nucleus," IIBIT 15)	cyte to Adipocyte: D Critical Review in Cl	linical Laborato	ry Sciences 1999	36(1), 1-3	34

DATE CONSIDERED XAMINER

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

50011 4440				Sheet bof Z			
FORM 1449*	'		Docket Number	Application Number			
			MA9658D1V5	10/6/4,643			
		ON DISCLOSURE STATEMENT	Applicant				
1	41	AN APPLICATION	Fraser et al.				
			Filing Date	Group Art Unit			
	(Use se	everal sheets if necessary)	7/7/03	1632			
		OTHER DOCUMENTS (Including Author, Til	le. Date. Pertinent Pages, Etc	.)			
		Vassaux, et al., "Proliferation and differentia Medium: Differential Action of Anti-Adipog 249-256 (EXHIBIT 16)	tion of Rat Adipose Precurso	Cells in Chemically Defined			
		Wabitsch, et al., "Biological Effects of Huma Newly Differentiated Adipocytes in primary (EXHIBIT 17)	Culture," Metabolism 1996 V	'ol 45,No. 1 pp34-42			
		Young et al., "Mesenchymal Stem Cells Res Developmental Dynamics 1995 202(2), 137-	ide Within the Connective Tis 144 (EXHIBIT 18)	ssues of Many Organs,"			
							
			·	, , , , , , , , , , , , , , , , , , ,			
	<u>.</u>	-					
· 							
-							
,							
,							
· · · · · · · · · · · · · · · · · · ·							
							
							
							
!							

XAMINER

DATE CONSIDERED

EX:MINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in

conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449°	Docket Number Application Number 10/6/4.643 Applicant Fraser et al.			
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION				
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit		

		U.S. P.	TENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS		DATE OPRIATE		
HALLIAL	5,591,625	January 7, 1997	Gerson, et al.		·				
	(Exhibit 19)						 :_		
	5,786,207	July 28, 1998	Katz, et al.						
	(Exhibit 20)	O-t-b 27, 4009	Young, et al.						
	5,827,735 (Exhibit 21)	October 27, 1998	Young, et al.		!				
	5,827,740 (Exhibit 22)	October 27, 1998	Pittenger						
	5,906,934 (Exhibit 23)	May 25, 1999	Grande, et al.						
	5,908,784 (Exhibit 24)	June 1, 1999	Johnstone et al.						
i	6,200,606 B1 (Exhibit 25)	March 13, 2001	Peterson, et al.						
	(CAMBIC 20)	FOREIGN	PATENT DOCUMEN	VTS		1			
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANS	LATION		
	DOCOMENT NO.					YES	NO		
		R DOCUMENTS (Include							
	00/0	ett, JH, et al., 1991 <i>J. Ce</i> 1):131-139 (Exhibit 26)							
	Fifec	ford, et al., 1986 <i>Endo</i> . s on Alkaline Phosphata	ise. Type I Collagen a	ind Proliferation	1," 119:1//0-1/8) (Exhibit	21)		
	Bjom	son, et al., 1999 Science	"Turning Brain into 83-534-537 (Exhibit	Blood: A Hema 28)	topoetic Fate Ad	opted by A	duit		
Neural Stem Cells in Vivo," 283:534-537 (Exhibit 28) Bruder, et al., 1997 J. Cell Biochem. "Growth Kinetics, Self-Renewal, and the Osteo Purified Human Mesenchymal Stem Cells During Extensive Subcultivation and Follo Cryopreservation," 64:278-294 (Exhibit 29)					eogenic Po	tential of			
						 			
	Butle huma	Butler-Browne, et al., 1990 Anat. Embryol. (Berl) "Myosin heavy and light chain expression during human skeletal muscle development and precocious muscle maturation induced by thyroid hormone,"							
	181:513-522 (Exhibit 30) Cheng S-L., et al., 1994 Endo "Differentiation of Human Bone Marrow Osteogenic Stromal Cells in Vitro: Induction of the Osteoblast Phenotype by Dexamethasone," 134: 277-286 (Exhibit 31)								
	1								

EXAMINER

DATE CONSIDERED

CAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in Informance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449)

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*	Docket Number Application Number MA9658DIV 5 10/6/4,643				
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.				
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit /632			

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
1	Chyun, et al., 1984 Endo. "Cortisol Decreases Bone Formation by Inhibiting Periosteal Cell
	Proliferation," 114:477-480 (Exhibit 32)
	Conget, PA and JJ Minguell 1999 J. Cell. Physiol "Phenotypical and Functional Properties of Human
	Bone Marrow Mesenchymal Progenitor Cells," 181:67-73 (Exhibit 33)
1	Cooper, et al., 1999 J. Endocrinol. "Glucocorticoid activity, inactivity and the osteoblast,"
	163:159-164 (Exhibit 34)
	Denker, A.E., et al., 1995 Differentiation "Formation of cartilage-like spheroids by micromass cultures
	of murine C3H101/2 cells upon treatment with transforming growth factor-β1," 59: 25-34 (Exhibit 35)
	Denker, et al., 1999 Differentiation "Chondrogenic differentiation of murine C3H10T1/2 multipotential
	mesenchymal cells: I. Stimulation by bone morphogenetic protein-2 in high-density micromass
}	cultures," 64:67-76 (Exhibit 36)
	Dimri, et, al., 1995 Proc. Natl. Acad. Sci. USA "A biomarker that identifies a senescent human cells in
	culture and in aging skin in vivo," 92: 9363-9367 (Exhibit 37)
 	Ducy, et, al., 1997 Cell "Osf2/Cbfa1: A Transcriptional Activator of Osteoblast Differentiation," 89:747-
	754 (Exhibit 38)
	Ferrari G., et al., 1998 Science "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors,"
	279: 1528-1530 (Exhibit 39)
}- · · · · · · · · · · · · · · · · · · ·	
1	Frederikson and McKay 1988 J. Neurosci. "Proliferation and Differentiation of Rat Neuroepithelial
'	Precursor Cells in vivo," 8:1144-1151 (Exhibit 40)
·	Fridman, et al., 1992 Int. J. Cancer "Malignant Transformation of NIH-3T3 Cells After Subcutaneous co-
	Injection With A Reconstituted Basement Membrane (Matrigel)," 5/(5), 740-44 (Exhibit 41)
1	Grigoradis A., et al., 1988 J. Cell Biol. "Differentiation of Muscle, Fat, Cartilage, and Bone from
]	Progenitor Cells Present in a Bone-derived Clonal Cell Population: Effect of Dexamethasone," 106:
	2139-2151(Exhibit 42)
	Guerriero, V and JR Florini 1980 Endocrinology "Dexamethasone Effects on Myoblast Proliferation and
	differentiation," 106:1198-1202(Exhibit 43)
	Hall, BK 1981 "Intracellular and extracellular control of differentiation of cartilage and bone,"
<u> </u>	Histochem. J. 13:599-614(Exhibit 44)
	Jaiswal, et al., 1997 "Osteogenic Differentiation of Purified, Culture-Expanded Human Mesenchymal
	Stem Cells In Vitro," J. Cell Biochem. 64:295-312(Exhibit 45)
	Johnstone B., et al., 1998 "In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Progenitor
	Cells," Exp. Cell Res. 238: 265-272(Exhibit 46)
	Kania, et al., 1990 "The Drosophila segmentation gene runt encodes a novel nuclear regulatory protein
	that is also expressed in the developing nervous system," Genes Dev. 4:1701-1713 (Exhibit 47)
	Kehlen, A. et al., 2000 J. Cell Biochem. "Increased Lymphocytic Aminopeptidase N/CD13 Promoter
	Activity After Cell-Cells Contact," 80:115-123(Exhibit 48)
	Kosher, RA, et al., 1986 J. Cell Biol. "Collagen Gene Expression During Limb Cartilage
	Differentiation," 102:1151-1156(Exhibit 49)
	Kuri-Harcuch, W. et al., 1984, Differentiation "Extracellular matrix production by mouse 3T3-F442A
	cells during adipose differentiation in culture," 28(Exhibit 50)
	Lanier, L.L. et al., 1991 J. Immunol. "Molecular and Functional Analysis of Human Natural Killer Cell-
 	Associated Neural Cells Adhesion Molecule (N-Cam/CD56), "146:4421-4426(Exhibit 51)
	Lawson-Smith, M.J. and McGeachie, J.K. 1998 J. Anat. "The identification of myogenic cells in
	skeletal muscle, with emphasis on the use of tritiated thymidine autoradiography and desmin
1	antibodies," 192:161-171 (Exhibit 52)

:XAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in

FORM 1449*	Docket Number MA9658D:V	Application Number	
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.		
(Use several sheets if necessary)	Filing Date 7/7/02	Group Art Unit /632	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Leboy, et al., 1991 J. Cell Physiol. "Dexamethasone Induction of Osteoblast mRNAs in Rat Marrow Stromal Cell Cultures," 146:370-378 (Exhibit 53)
Lendahl, et al., 1990 Cell "CNS Stem Cells Express a New Class of Intermediate Filament Protein," 60:585-595 (Exhibit 54)
Lenoir, N. 2000 Science "Europe Confronts The Embryonic Stem Cell Research Challenge," 287:1425-1427 (Exhibit 55)
Lumelsky, N., et al. 2001 Science "Differentiation of Embryonic Stem Cells to Insulin-Secreting Structures Similar to Pancreatic Islets," 292:1389-1394. (Exhibit 56)
Lynch, et al., 1995, Exp. Cell Res. "The Influence of Type I Collagen on the Development and Maintenance of the Osteoblast Phenotype in Primary and Passaged Rat Calvarial Osteoblasts:
Modification of Expression of Genes Supporting Cell Growth, Adhesion, and Extracelluar Matrix Mineralization," 216:35-45 (Exhibit 57)
Malaval, et al., 1994 J. Cell. Physiol. "Cellular Expression of Bone-Related Proteins During In Vitro Ostegenesis in Rat Bone Marrow Stromal Cell Culture," 158:555-572 (Exhibit 58)
Manduca, et al., 1992 Eur. J. Cell Biol. "Chondrogenic differentiation in chick embryo osteoblast cultures," 57:193-201 (Exhibit 59)
Martin, et al., 1999 Exp. Cell Res. "Mammalian Chondrocytes Expanded in the Presence of Fibroblast Growth Factor 2 Maintain the Ability to Differentiate and Regenerate Three-Dimensional Cartilaginous Tissue," 253:681-688 (Exhibit 60)
Megeney, et al., 1996 Genes Dev. "MyoD is required for myogenic stem cell function in adult skeletal muscle," 10:1173-1183 (Exhibit 61)
Molkentin and Olson 1996 Curr. Opin. Genet. Dev. "Defining the regulatory networks for muscle development," 6:445-453 (Exhibit 62)
Mundlos, et al., 1997 Cell "Mutations Involving the Transcription Factor CBFA12 Cause Cleidocranial Dysplasia," 89:773-779 (Exhibit 63)
Nehls, A. and D Drenckhahn 1991 J. Cell Biol. "Heterogeneity of Microvascular Pericytes for Smooth Muscle Type Alpha-Actin," 113:147-154 (Exhibit 64)
Owen, TA, et al., 1990 J. Cell Physiol. "Progressive Development of the Rat Osteoblast Phenotype in Vitro: Reciprocal Relationships in Expression of Genes Associated with Osteoblast Proliferation and Differentiation During Formation of the Bone Extracellular Matrix," 143:420-430 (Exhibit 65)
Paul S.R., et al., 1991 Blood "Stromal Cell-Associated Hematopoiesis: Immortalization and Characterization of Primate Bone Marrow-Derived Stromal Cell Line," 77: 1723-33 (Exhibit 66)
Pittenger M.F., et al., 1999 Science "Multilineage Potential of Adult Human Mesenchymal Stem Cells," 284: 143-147 (Exhibit 67)
Prockop D.J. 1997 Science "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues," 276: 71-74 (Exhibit 68)
Rando, et al., 1995 Exp. Cell Res. "The Fate of Myoblasts Following Transportation into Mature Muscle," 220:383-389 (Exhibit 69)
Saalbach, A., et al., 1997 Cell and Tiss. Res. "The Fibroblast-specific MAb ASO2: a novel tool for detection and elimination of human fibroblasts," 290:593-599 (Exhibit 70)
Sanchez-Ramos, et al., 2000 "Adult Bone Marrow Stromal Cells Differentiate into Neural Cells in
Vitro," Exp. Neurol. 164:247-256 (Exhibit 71) Seale and Rudnicki 2000 Dev. Biol. "A New Look at the Origin, Function, and "Stem-Cell" Status of Muscle Satellite Cells," 218:115-124 (Exhibit 72)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is	in conformance with MPEP 609; draw line through citation if not in
conformance and not considered. Include copy of this form for next	communication to the Applicant.

^{*}Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*	Docket Number MA9658D1ソS	Application Number	
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.		
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit	

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Shukunami, C., et al., 1998 Exp. Cell Res. "Sequential Progression of the Differentiation Program by Bone Morphogenetic Protein-2 in Chondrogenic Cell Line ATDC5," 241:1-11 (Exhibit 73)
	Shukunami C., et. al., 1996 Journ. Of Cell Bio. "Chrondrogenic Differentiation of Clonal Mouse Embryonic Cell Line ATDC5 In Vitro: Differentiation-dependent Gene Expression of Parathyroid
	Hormone (PTH)/PTH-related Peptide Receptor," 133:2:457-468 (Exhibit 74) Silberstein, L., et al., 1986 Cell "Developmental Progression of Myosin Gene Expression in Cultured Muscle Cells," 46:1075-1081 (Exhibit 75)
	Suga, S., et al., 1996, "Eur. J. Cell Biol. "Intracellular localization of antigens recognized by anti- vimentin monoclonal antibodies (mAbs): Cross-reactivities of anti-vimentin mAbs with other cellular components 70:84-91 (Exhibit 76)
	Tacchetti, C, et al., 1992 Exp Cell Res. "Cell Condensation in Chondrogenic Differentiation," 200:26-33 (Exhibit 77)
	Tapscott, et al., 1988 Science "MyoD1: A Nuclear Phosphoprotein Requiring a Myc Homology Region to Convert Fibroblasts to Myoblasts," 242:405-411 (Exhibit 78)
	Thornell, et al., 1984 J. Neurol. Sci. "Development of Fiber Types in Human Fetal Muscle," 66:107-115 (Exhibit 79)
	Totonoz, et al., 1995 Nucl. Acid Res "mPPARy2: tissue-specific regulator of an adipocyte enhancer," (Exhibit 80)
	Tsonis and Goetinck 1990 Exp. Cell Res. "Cell Density Dependent Effect of a Tumor Promoter on Proliferation and Chondrogenesis of Limb Bud Mesenchymal Cells," 190:247-253 (Exhibit 81)
	von der Mark, et al., 1977 Nature "Relationship between cell shape and type of collagen synthesised as chondrocytes lose their cartilage phenotype in culture," 267:531-532 (Exhibit 82)
	Vukicevic et al., 1992 Exp. Cell Res "Identification of Multiple Active Growth factors in Basement Membrane Matrigel Suggests Caution in Interpretation of Cellular Activity Related to Extracellular Matrix Components,", 202(1), 1-8 (Exhibit 83)
	Weintraub, et al., 1991 Science "The myoD Gene Family: Nodal Point During Specification of the Muscle Cell Lineage," 251:761-766 (Exhibit 84)
	Woodbury, et al., 2000 J. Neurosci. Res. Science "Adult Rat and Human Bone Marrow Stromal cells Differentiate Into Neurons," 61:364-370 (Exhibit 85)
	Young, 2000 Science "A Time for Restraint," 287:1424. (Exhibit 86)
	Zalin, RJ 1987 Exp. Cell Res. "The Role of Hormones and Prostanoids in the in Vitro Proliferation and differentiation of Human Myoblasts," 172:265-281. (Exhibit 87)
<u> </u>	

SAMIN	NEK	
-------	-----	--

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449°	Docket Number	Application Number	
	MA9658 DI U S	10/6/4,643	
INFORMATION DISCLOSURE STATEMENT	Applicant		
IN AN APPLICATION	Fraser et al.		
	Filing Date	Group Art Unit	
(Use several sheets if necessary)	7/7/03	1632	

		U.S. PA	TENT DOCUMENTS				
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS		IG DATE ROPRIATE
				·			
	FOREIGN PATENT DOCUMENTS						
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS		SLATION
						YES	NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		m, Michael A., "Age-relates," Biochem J. 333:7		n oestrogen rece	eptor function ar	nd levels i	Л
	Aso, I Nonex	Hisashi, et al., "A Preadip pression of GLUT-4 pro 59-375. (Exhibit 89)	ocyte Clonal Line fro	m bovine Intrar Differentiation	nuscular Adipos L'' <i>Biochem. Bio</i>	se Tissue: phys. Res	. Commun.
	Mouse	ohr, David A. et al., "Tiss Adipocytes," <i>Biochem</i> .	Biophys. Res. Comun	. 1985 132:850-	855. (Exhibit 9	0)	
	Huma	etz, S. et al., "Endoglin Is n Endothelial Cells," J. E	iol. Chem., 1992 267	:19027-19030.	(Exhibit 91)		
	Chen,	Theresa L. et al., "10,25- ol. Chem. 1983 258:4350-	-Dihydroxyvitamin D	Receptors in C	Cultured Rat oste	oblast-lik	e Cells,"
·		oto, Hirayuki et al., "Cbf l. Chem. 2000 275:8695-		story Factor in (Chondrocyte Ma	turation,"	
	Herma	an, Ira M. and Patricia D' s," <i>J. Cell Biol</i> . 1985 101	Amore, "Microvascu	lar Pericytes Co	ontain Muscle an	d Nonmu	scle
	Lucas	, Paul A. et al., "Mesench 22, R212 (Exhibit 95)	nymal Stem Cells From	m Granulation	Fissue," J. Cell I	Biochem,	1993
	Majes	ka, Robert J. and Gideon blastic Osteosarcoma Ce					s in
	Perias	amy, Muthu et al., "Regularophy," Biochem. J. 198	lation of myosin heav	vy-chain gene e	xpression during	sieletal-	nuscle
	Poliar	d, a. et al., "Controlled C genic, Chondrogenic, or A	onversion of an Immo	ortalized Mesod	ermal progenito 995 130;1461-1	r Cell To 472. (Ext	vards iibit 98)
	Price, is Ass (Exhi	Paul A. et al., "Matrix G ociated With The Organi bit 99)	LA Protein, A New γ c Matrix of Bone," B	-Carboxyglutan liochem. Biophy	nic Acid-Contain s. Res. Commun	ning Prote	in Which 17:765-771.
	Trans	o, Thomas A. and Helen l plantation for Cell-media	ited Gene Therapy," J	. Cell Biol 1994	125:1275-1287	. (Exhibi	t 100)
	Weine Differ	er, Francis R. et al., "Reg entiation and Tumor nec	ualtion of collagen Go rosis Factor a," <i>Bioch</i>	ene Expression em 1989 28:409	in 3T3-L1 Cells 94-4099. (Exhib	Efects of the test	Adipocyte

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is	in conformance with MPEP 609; draw line through citation if not in
conformance and not considered. Include copy of this form for next	communication to the Applicant.

^{*}Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449°		Docket Number	Application Number	
		MA9658DIU 5	101614,643	
INFORMATION DISCLOSURE STATEMENT		Applicant		
	IN AN APPLICATION	Fraser et al.		
		Filing Date	Group Art Unit	
	(Use several sheets if necessary)	7/7/03	1672	
	Williams, Irene H. and S. Efthimios Po Effect Of Indomethacin, Prostaglandin Biochem. Biophys. Res. Commun. 197 Wise, Leigh S. and Howard Green, "P	E ₁ And Cyclic AMP On The Pr 7 77:175-186. (Exhibit 102) articipation of One Isozyme of C	rocess of Differentiation," Cytosolic Glycerophosphate	
	Effect Of Indomethacin, Prostaglandin Biochem. Biophys. Res. Commun. 197 Wise, Leigh S. and Howard Green, "P. Dehydrogenase in the Adipose Convert (Exhibit 103)	E ₁ And Cyclic AMP On The Prite 17 77:175-186. (Exhibit 102) articipation of One Isozyme of Cision of 3T3 Cells," <i>J. Biol. Che</i>	Cytosolic Glycerophosphate m. 1979 254:273-275.	
	Effect Of Indomethacin, Prostaglandin Biochem. Biophys. Res. Commun. 197 Wise, Leigh S. and Howard Green, "P. Dehydrogenase in the Adipose Conver	E ₁ And Cyclic AMP On The Pri 17 77:175-186. (Exhibit 102) articipation of One Isozyme of C sion of 3T3 Cells," <i>J. Biol. Che</i> tion of the Rat osteocalcin Gene	Cytosolic Glycerophosphate m. 1979 254:273-275. e: Stimulation of Promoter	
	Effect Of Indomethacin, Prostaglandin Biochem. Biophys. Res. Commun. 197 Wise, Leigh S. and Howard Green, "P. Dehydrogenase in the Adipose Conver (Exhibit 103) Yoon, Kyonggeun et al., "Characteriza	E ₁ And Cyclic AMP On The Pri 17 77:175-186. (Exhibit 102) articipation of One Isozyme of C sion of 3T3 Cells," <i>J. Biol. Che</i> tion of the Rat osteocalcin Gene	Cytosolic Glycerophosphate m. 1979 254:273-275. e: Stimulation of Promoter	
	Effect Of Indomethacin, Prostaglandin Biochem. Biophys. Res. Commun. 197 Wise, Leigh S. and Howard Green, "P. Dehydrogenase in the Adipose Conver (Exhibit 103) Yoon, Kyonggeun et al., "Characteriza	E ₁ And Cyclic AMP On The Pri 17 77:175-186. (Exhibit 102) articipation of One Isozyme of C sion of 3T3 Cells," <i>J. Biol. Che</i> tion of the Rat osteocalcin Gene	Cytosolic Glycerophosphate m. 1979 254:273-275. e: Stimulation of Promoter	

	•
	 ·
-	
·	

[= XAMINER DATE CONSIDERED

(AMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in unformance and not considered. Include copy of this form for next communication to the Applicant.

Sub::titute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*	Docket Number MA9658DIU S	Application Number 10/6/4, ももる	
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.		
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit /632	

		U.S.	PATENT DOCUMENTS			
EXAMINER	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
INITIAL	5,226,914 (Exhibit 105)	07/13/93	Caplan et al.			11/16/90
	5,736,396 (Exhibit 106)	04/07/98	Bruder et al.			01/24/95
	5,811,094 (Exhibit 107)	09/22/98	Caplan et al.			04/11/95
-	5,817,050 (Exhibit 108)	10/06/98	Klein			05/29/97
	5,908.784 (Exhibit 109)	06/01/99	Johnstone et al.			11/15/96

 DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
DOGGINETT NO.	•	, i			YES	NO
 WO97/18299 (Exhibit 110)	05/22/97	PCT				X
 W097/39104 (Exhibit 111)	10/23/97	PCT		 		X
W097/40137 (Exhibit 112)	10/30/97	PCT				Х
 WO97/41208 (Exhibit 113)	11/06/97	PCT				Х
 WO98/20731 (Exhibit 114)	05/22/98	PCT				Х
 WO98/32333 (Exhibit 115)	07/30/98	PCT				Х
 W098/51317 (Exhibit 116)	11/19/98	PCT				Х
 W099/01145 (Exhibit 117)	01/14/99	PCT	<u> </u>			Х
 W099/03973 (Exhibit 118)	01/28/99	PCT				Х
 WO99/11789 (Exhibit 119)	03/11/99	PCT				X

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Bastard, J. P. et al., "A Mini-Liposuction Technique Adapted to the Study of Human Adipocyte Glucose Transport System," <i>Diabetologia</i> , 36(Suppl. 1):A135, 1993 (Exhibit 120) Caplan, Amold I., "The Mesengenic Process," <i>Clinics in Plastic Surgery</i> , 21:429-35, 1994 (Exhibit 121)
Crandall, David L. et al., "Identification of Estrogen Receptor B RNA in Human Breast and Abdominal Subcutaneous Adipose Tissue," <i>Biochemical and Biophysical Research Communications</i> , 248:523-6, 1998 (Exhibit 122)

EXAMINER	DATE CONSIDERED
System SD Living of cases considered, whether or not citation is	in conformance with MPEP 609; draw line through citation if not in
	communication to the Applicant. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

^{*}Substitute Disclosure Statement Form (PTO-1449)

FORM 1449*	Docket Number MA9658 DIV	Application Number 10/6/4, 643	
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Applicant Fraser et al.		
	Filing Date 7/7/03	Group Art Unit	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Hauner, Hans et al., "Promoting Effect of Glucocorticoids on the Differentiation of Human Adipocyte Precursor Cells Cultured in a Chemically Defined Medium," <i>Journal of Clinical Investigation</i> , 84:1663-70, 1989 (Exhibit 123)
Hauner H. et al., "Glucocorticoids and Insulin Promote the Differentiation of Human Adipocyte Precursor Cells into Fat Cells." Journal of Clinical Endocrinology and Metabolism, 64:832-5, 1987 (Exhibit 124)
Johnson, P. R. et al., "Uncontrolled adipocyte proliferation is not the primary lesion in the genetically- obese Zucker rat." International Journal of Obesity, 5:563-70, 1981 (Exhibit 125)
Killinger, D. W. et al., "Influence of Adipose Tissue Distribution on the Biological Activity of Androgens," Annals New York Academy of Sciences, 595:199-211, 1990 (Exhibit 126)
Killinger, Donald W. et al., "The Relationship Between Aromatase Activity and Body Fat Distribution," Stemids, 50:61-72, 1987 (Exhibit 127)
Lafontan, M. et al., "Réflexions sur une nouvelle approche de chirurgie plastique réparatrice: la réimplantation de fragments de tissu adipeux prélevés par liposuccion," Ann. Chur. Plast. Esthet., 34:77-
Lam, Anson and Ronald Moy, "The Potential for Fat Transplantation," J. Dermatol. Surg. Oncol., 18:432-
Lecoeur, L. and J. P. Ouhayoun, "In vitro induction of osteogenic differentiation from non-osteogenic mesenchymal cells." <i>Biomaterials</i> , 18:989-93, 1997 (Exhibit 130)
Loncar, D., "Ultrastructural analysis of differentiation of rat endoderm in vitro. Adipose vascular-strômal cells induce endoderm differentiation, which in turn induces differentiation of the vascular-stromal cells into chondrocytes," J. Submicrosc. Cytol. Pathol., 24:509-19, 1992 (Exhibit 131)
Novakofski, Jan E., "Primary Cell Culture of Adipose Tissue," Biology of the Adipocyte: Research Approaches, Van Nostrand Reinhold Company, NY, 1987 160-97 (Exhibit 132)
Pedersen, S. B. et al., "Identification of oestrogen receptors and oestrogen receptor mRNA in human adjoined tissue." Furniera Journal of Clinical Investigation, 26:262-9, 1996 (Exhibit 133)
Pettersson, Per et al., "Adipocyte Precursor Cells in Obese and Nonobese Humans," Metabolism, 34:808-12, 1985 (Exhibit 134)
Ramsay, T. G. et al., "Pre-Adipocyte Proliferation and Differentiation in Response to Hormone Supplementation of Decapitated Fetal Pig Sera," J. Anim. Sci., 64:735-44, 1987 (Exhibit 135)
Rubens, F. D. et al., "Tissue Factor Expression by Cells Used for Sodding of Prosthetic Vascular Grans, Journal of Surgical Research, 72:22-8, 1997 (Exhibit 136)
Smahel, J., "Aspiration lipectomy and adipose tissue injection: pathophysiologic commentary," European lowest of Plastic Summer, 14:126-31, 1991 (Exhibit 137)
Springhorn, Jeremy P. et al., "Human Capillary Endothelial Cells from Abdominal Wall Adipose Tissue: Isolation Using an Anti-Pecam Antibody," In Vitro Cellular & Developmental Biology-Animal, 31:473-81, 1995 (Exhibit 138)
Tavassoli, Mehdi, "In Vivo Development of Adipose Tissue Following Implantation of Lipid-Depleted Cultured Adipocyte." Experimental Cell Research, 137:55-62, 1982 (Exhibit 139)
Williams, John T. et al., "Cells Isolated from Adult Human Skeletal Muscle Capable of Differentiating into Multiple Mesodermal Phenotypes," <i>The American Surgeon</i> , 65:22-6, 1999 (Exhibit 140)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is	s in conformance with MPEP 609; draw line through citation if not in
l seefermance and not considered. Include conv. of this form for next	t communication to the Applicant. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

^{*}Substitute Disclosure Statement Form (PTO-1449)

FORM 1449*	Docket Number MA9658DIVS	Application Number	
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.		
(Use several sheets if necessary)	Filing Date 7/7/03	Group Art Unit 1632	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Williams, Stuart K. et al., "Liposuction-derived human fat used for vascular graft sodding contains endothelial cells and not mesothelial cells as the major cell type," <i>Journal of Vascular Surgery</i> , 19:916-23, 1994 (Exhibit 141)
Włodarski, Krzysztof H., "Section III. Basic Science and Pathology. Properties and Origin of Osteoblasts," Clinical Orthopaedics and Related Research, 252:276-93, 1990 (Exhibit 142)
Ahrens, Patricia Buckley et al., "Stage-Related Capacity for Limb Chondrogenesis in Cell Culture," Developmental Biology, 1977, 60:69-82 (Exhibit 143)
Alameddine, Hala S. et al., "Regeneration of Skeletal Muscle Fibers from Autologous Satellite Cells Multiplied In Vitro. An Experimental Model for Testing Cultured Cell Myogenicity," Muscle & Nerve, 1989, 12:544-55 (Exhibit 144)
Angele, P. et al., "Engineering of Osteochondral Tissue with Bone Marrow Mesenchymal Progenitor Cells in a Derivatized Hyaluronan-Gelatin Composite Sponge," <i>Tissue Engineering</i> , 1999, 5:545-53 (Exhibit 145)
Bailey, A. J. et al., "Age-Related Changes in the Biochemical Properties of Human Cancellous Bone Collagen: Relationship to Bone Strength," Calcified Tissue International, 1999, 65:203-10 (Exhibit 146)
Barghorn, A. et al., "α-Smooth Muscle Actin Distribution in the Pulmonary Vasculature Comparing Hypoplastic and Normal Fetal Lungs," <i>Pediatric Pathology & Laboratory Medicine</i> , 1998, 18:5-22 (Exhibit 147)
Baylink, David J., "Glucocorticoid-Induced Osteoporosis," The New England Journal of Medicine, 1983, 309:306-8 (Exhibit 148)
Becerra, José et al., "Demineralized Bone Matrix Mediates Differentiation of Bone Marrow Stromal Cells In Vitro: Effect of Age of Cell Donor," <i>Journal of Bone and Mineral Research</i> , 1996, 11:1703-14 (Exhibit 149)
Beiser, Ian H. and Irvin O. Kanat, "Subchondral Bone Drilling: A Treatment for Cartilage Defects," Journal of Foot Surgery, 1990, 29:595-601 (Exhibit 150)
Breen, Ellen C. et al., *TGFß Alters Growth and Differentiation Related Gene Expression in Proliferating Osteoblasts In Vitro, Preventing Development of the Mature Bone Phenotype,* Journal of Cellular Physiology, 1994, 160:323-35 (Exhibit 151)
Bruder, Scott P. et al., "Bone Regeneration by Implantation of Purified, Culture-Expanded Human Mesenchymal Stem Cells," <i>Journal of Orthopaedic Research</i> , 1998, 16:155-62 (Exhibit 152)
Butnariu-Ephrat, Miriam et al., "Resurfacing of Goat Articular Cartilage by Chondrocytes Derived From Bone Marrow," Clinical Orthopaedics and Related Research, 1996, 330:234-43 (Exhibit 153)
Campion, Dennis R., "The Muscle Satellite Cell: A Review," Internationals Review of Cytology, 1984, 87:225-51 (Exhibit 154)
Caplan, Amold I., "Mesenchymal Stem Cells," Journal of Orthopaedic Research, 1991, 9:641-50 (Exhibit 155)
Caplan, Arnold I., "The Mesengenic Process," Clinics in Plastic Surgery, 1994, 21:429-35 (Exhibit 156)
Carranza-Bencano, A. et al., "Comparative Study of the Reconstruction of Articular Cartilage Defects with Free Costal Perichondrial Grafts and Free Tibial Periosteal Grafts: An Experimental Study on Rabbits," Calcified Tissue International, 1999, 65:402-7 (Exhibit 157)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is	s in conformance with MPEP 609; draw line through citation if not in
conformance and not considered. Include copy of this form for next	t communication to the Applicant.
*Substitute Disclosure Statement Form (PTO-1449)	Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

*Substitute Disclosure Statement Form (PTO-1449)

Docket Number	Application Number	
MA9658D W5	10/6/4,643	
Applicant		
Fraser et al.		
Filing Date	Group Art Unit	
7/7/03	1632	
	Applicant Fraser et al. Filing Date	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Chen, Xiaoli et al., "Differentiation-dependent expression of obese (ob) gene by preadipocytes and adipocytes in primary cultures of porcine stromal-vascular cells," <i>Biochimica et Biophysica Acta</i> , 1997, 1359:136-42 (Exhibit 158)
Chimal-Monroy, Jesus and Lino Diaz de Leon, "Expression of N-cadherin, N-CAM, fibronectin tenascin is stimulated by TGF-β1, β2, β3 and β5 during the formation of precartilage condensations," <i>The International Journal of Developmental Biology</i> , 1999, 43:59-67 (Exhibit 159)
Deng, Weiwen et al., "In Vitro Differentiation of Human Marrow Stromal Cells into Early Progenitors of Neural Cells by Conditions That Increase Intracellular Cyclic AMP," <i>Biochemical and Biophysical Research Communications</i> , 2001, 282:148-52 (Exhibit 160)
Dennis, James E. et al., "A Quadripotential Mesenchymal Progenitor Cell Isolated from the Marrow of an Adult Mouse," <i>Journal of Bone and Mineral Research</i> , 1999, 14:700-9 (Exhibit 161)
Dias, Peter et al., "The Molecular Basis of Skeletal Muscle Differentiation," Seminars in Diagnostic Pathology, 1994, 11:3-14 (Exhibit 162)
Diefenderfer, David L. and Carl T. Brighton, "Microvascular Pericytes Express Aggrecan Message Which is Regulated by BMP-2," <i>Biochemical and Biophysical Research Communications</i> , 2000, 269:172-8 (Exhibit 163)
Eisenberg, Shlomo, "High density lipoprotein metabolism," Journal of Lipid Research, 1984, 25:1017-58 (Exhibit 164)
Fajas, Lluis, et al., "Transcriptional control of adipogenesis," Current Opinion in Cell Biology, 1998, 10:165-73 (Exhibit 165)
Famdale, Richard W. et al., "Improved quantitation and discrimination of sulphated glycosaminoglycans by use of dimethylene blue," <i>Biochimica et Biophysica Acta</i> , 1986, 883:173-7 (Exhibit 166)
Fülöp, Csaba et al., "Expression of Alternatively Spliced Epidermal Growth Factor-like Domains in Aggrecans of Different Species," <i>The Journal of Biological Chemistry</i> , 1993, 268:17377-83 (Exhibit 167)
Glowacki, J., "Influence of Age on Human Marrow," Calcified Tissue International, 1995, 56(Supp. 1):S50-1 (Exhibit 168)
Grigoriadis, Agamemnon E. et al., "Analysis of chondroprogenitor frequency and cartilage differentiation in a novel family of clonal chondrogenic rat cell lines," <i>Differentiation</i> , 1996, 60:299-307 (Exhibit 169)
Hardingham, Tim et al., "Studies on the Synthesis, Secretion and Assembly of Proteoglycan Aggregates by Chondrocytes," Matrices and Cell Differentiation, 1984, 151:17-29 (Exhibit 170)
 Haynesworth, S. E. et al., "Cell Surface Antigen on Human Marrow-Derived Mesenchymal Cells are Detected by Monoclonal Antibodies," <i>Bone</i> , 1992, 13:69-80 (Exhibit 171)
Huss, Ralf, "Isolation of Primary and Immortalized CD34" Hematopoietic and Mesenchymal Stem Cells from Various Sources," Stem Cells, 2000, 18:1-9 (Exhibit 172)
Iwasaki, Motoki et al., "Regulation of Proliferation and Osteochondrogenic Differentiation of Periosteum- Derived Cells by Transforming Growth Factor-β and Basic Fibroblast Growth Factor," <i>Journal of Bone and Joint Surgery</i> , 1995, 77A:543-54 (Exhibit 173)
Katz, Adam J. et al., "Emerging Approaches to the Tissue Engineering of Fat," Clinics in Plastic Surgery, 1999, 26:587-603 (Exhibit 174)

EXAMINER	DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in			
conformance and not considered. Include copy of this form for next	communication to the Applicant.		

*Substitute Disclosure Statement Form (PTO-1449)

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*	Docket Number	Application Number
	MA9658D1U 5	10/6/4.643
INFORMATION DISCLOSURE STATEMENT	Applicant Fraser et al.	
IN AN APPLICATION		
·	Filing Date	Group Art Unit
(Use several sheets if necessary)	7/7/03	1632

Kirsch, Thorsten and Klaus von der Mark, "Remodelling of collagen types I, II and X and calcification of human fetal cardiage." Bone and Mineral, 1992, 16:107-17 (Exhibit 175) Kosher, Robert A, and Michael Solursh, "Widespraed Distribution of Type II Collagen during Embryonic Chick Development," Developmental Biology, 1989, 131:558-66 (Exhibit 176) Lazarus, Hilard M, et al., "Human Bone Marrow-Derived Mesenchyral (Stromal) Progenitor Cells (MPCs) Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections," Journal of Hematotherapy, 1997, 6:447-55 (Exhibit 177) Leboy, Phoebe S, et al., "Ascorbic Acid Induces Alkaline Phosphatase, Type X Collagen, and Calcium Deposition in Cultured Chick Chondrocytes," The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178) Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification," Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow; Identification of Serum for Optimal Selection and Proliferation," in Vitro Cell. Dev. Biol Animal, 1996, 32:802-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem. 1964, 12:309-10 (Exhibit 181) Long, Michael W, et al., "Age-Related Phenohypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 54A:854-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle." In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adjocyte Oliferentiation," Annu. Rev. Biochem., 1995, 54:345-73 (Exhibit 184) Nale, R. B. et al., "Factor Vil-Associated Antigen in Human Lymphatic End	 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
human fetal cartilage." Bone and Mineral, 1992, 18:107-17 (Exhibit 175) Kosher, Robert A. and Michael Solursh. Widespread Distribution of Type II Collagen during Embryonic Chick Development." Developmental Biology, 1989, 131:558-66 (Exhibit 176) Lazarus, Hillard M. et al., "Human Bone Marrow-Derived Mesenchymal (Stromat) Progenitor Cells (MPCs) Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections." Journal of Hematotherapy, 1997, 6:447-55 (Exhibit 177) Leboy, Phoebe S. et al., "Ascorbic Acid Induces Alkaline Phosphatase, Type X Collagen, and Calcium Deposition in Cultured Chick Chondrocytes." The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178) Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification." Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation." In Vitro Cell. Dev. Biol Animal, 1996, 32:802-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem. 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 5A4:854-82 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 181) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "Rober A and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 18	
Chick Development," Developmental Biology, 1989, 131:58-56 (Exhibit 176) Lazarus, Hillard M. et al., "Human Bone Marrow-Dervied Mesenchymal (Stromal) Progenitor Cells (MPCs) Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections," Journal of Hematotherapy, 1997, 6:447-55 (Exhibit 177) Leboy, Phoebe S. et al., "Ascorbic Acid Induces Alkaline Phosphatase, Type X Collagen, and Calcium Deposition in Cultured Chick Chondrocytes," The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178) Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) 19teoblasts During Endochondral and Intramembranous Ossification," Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:602-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Genotology, 1999, 544:654-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle." In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 195) Nakan, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sar	human fetal cartilage," Bone and Mineral, 1992, 18:107-17 (Exhibit 175)
Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections," Journal of Hematotherapy, 1997, 6:447-55 (Exhibit 177) Leboy, Phoebe S. et al., "Ascorbic Acid Induces Alkaline Phosphatase, Type X Collagen, and Calcium Deposition in Cultured Chick Chondrocytes," The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178) Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification," Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:802-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 54A:854-62 (Exhibit 182) Lucas, P. A. et al., "Sloation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle." In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald. Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 11:6201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 185) Nakhara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakana, Hirotaka et al., "Factor VII-Associated Antigen in Human Skeletal Muscle Origin of Alveolar Soft-Par	Chick Development," Developmental Biology, 1989, 131:558-66 (Exhibit 176)
Deposition in Cultured Chick Chondrocytes," The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178) Lee, Yun-Shain and Cheng-Ming Chuong, "Adhesion Molecules in Skeletogenesis: I. Transient Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification," Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P. et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:602-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Procursor Cells." The Journals of Gerontology, 1999, 54A:B54-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle." In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Saroma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Sham W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 804:1795-812 (Exhibit 189) Olson, E. N. et al.,	Cannot Be Recovered from Peripheral Blood Progenitor Cell Collections," Journal of Hematotherapy, 1997, 6:447-55 (Exhibit 177)
Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification," Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179) Lennon, Donald P, et al., "Human and Animal Mesenchymal Progenitor Cells from Bone Marrow: Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:602-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 54A:854-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawm W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspe	Deposition in Cultured Chick Chondrocytes," The Journal of Biological Chemistry, 1989, 264:17281-6 (Exhibit 178)
Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:602-11 (Exhibit 180) Lev, Robert and S. S. Spicer, "Specific Staining of Sulphate Groups with Alcian Blue at Low pH," J. Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 54A:854-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 804:795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 373 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Expression of Neural Cell Adhesion Molecules (NCAM) in Osteoblasts During Endochondral and Intramembranous Ossification, Journal of Bone and Mineral Research, 1992, 7:1435-46 (Exhibit 179)
Histochem. Cytochem., 1964, 12:309-10 (Exhibit 181) Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 54A:854-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairaut, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Identification of Serum for Optimal Selection and Proliferation," In Vitro Cell. Dev. Biol Animal, 1996, 32:602-11 (Exhibit 180)
Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells." The Journals of Gerontology, 1999, 34A:854-62 (Exhibit 182) Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Histochem, Cytochem., 1964, 12:309-10 (Exhibit 181)
Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183) MacDougald, Ormond A. and M. Daniel Lane, "Transcriptional Regulation of Gene Expression During Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Long, Michael W. et al., "Age-Related Phenotypic Alterations in Populations of Purified Human Bone Precursor Cells," The Journals of Gerontology, 1999, 54A:B54-62 (Exhibit 182)
Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184) Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Lucas, P. A. et al., "Isolation of Putative Mesenchymal Stem Cells from Rat Embryonic and Adult Skeletal Muscle," In Vitro Cell Dev. Biol., 1992, 28:154A (Exhibit 183)
Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185) Nagle, R. B. et al., "Factor VII-Associated Antigen in Human Lymphatic Endothelium," Lymphology, 1987, 20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Adipocyte Differentiation," Annu. Rev. Biochem., 1995, 64:345-73 (Exhibit 184)
20:20-4 (Exhibit 186) Nakahara, H. et al., "Bone and Cartilage Formation in Diffusion Chambers by Subcultured Cells Derived from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Mullen, Richard J. et al., "NeuN, a neuronal specific nuclear protein in vertebrates," Development, 1992, 116:201-11 (Exhibit 185)
from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187) Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	20:20-4 (Exhibit 186)
Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188) O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	from the Periosteum," Bone, 1990, 11:181-8 (Exhibit 187)
O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189) Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Nakano, Hirotaka et al., "RT-PCR Suggests Human Skeletal Muscle Origin of Alveolar Soft-Part Sarcoma," Oncology, 2000, 58:319-23 (Exhibit 188)
Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190) Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," Proc. Natl. Acad. Sci. USA, 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	O'Driscoll, Shawn W., "Current Concepts Review: The Healing and Regeneration of Articular Cartilage," Journal of Bone and Joint Surgery, 1998, 80A:1795-812 (Exhibit 189)
Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," <i>Proc. Natl. Acad. Sci. USA</i> , 1979, 76:5138-42 (Exhibit 191) Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," <i>Bone</i> , 1999,	Olson, E. N. et al., "Know Your Neighbors: Three Phenotypes in Null Mutants of the Myogenic bHLH Gene MRF4," Cell, 1996, 85:1-4 (Exhibit 190)
Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999,	Pairault, Jacques and Howard Green, "A study of the adipose conversion of suspended 3T3 cells by using glycerophosphate dehydrogenase as differentiation marker," <i>Proc. Natl. Acad. Sci. USA</i> , 1979, 76:5138-42 (Exhibit 191)
24.545-54 (EXHIBIT 192)	Park, S. R. et al., "Interconversion Potential of Clone Human Marrow Adipocytes In Vitro," Bone, 1999, 24:549-54 (Exhibit 192)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is conformance and not considered. Include copy of this form for nex	s in conformance with MPEP 609; draw line through citation if not in the communication to the Applicant.
*Substitute Disclosure Statement Form (PTO-1449)	Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

^{*}Substitute Disclosure Statement Form (PTO-1449)

FORM 1449*	Docket Number MA9658D1V≤	Application Number
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION	Applicant Fraser et al.	
(Use several sheets if necessary)	Filing Date 7/7/07	Group Art Unit /632

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Pettersson, Per et al., "Cells in Human Adipose Tissue Developing into Adipocytes," Acta Med Scand, 1984, 215:447-51 (Exhibit 193)
Pierelli, Luca et al., "CD34+/CD105+ cells are enriched in primitive circulating progenitors residing in the G0 phase of the cell cycle and contain all bone marrow and cord blood CD34+/CD38 ^{low-} precursors, "British Journal of Haematology, 2000, 108:610-20 (Exhibit 194)
Price, Paul A., "GLA-Containing Proteins of Bone," Connective Tissue Research, 1989, 21:51-60 (Exhibit 195)
Price, Paul A. and Sharon A. Baukol, "1,25-Dihydroxyvitamin D ₃ Increases Synthesis of the Vitamin K-dependent Bone Protein by Osteosarcoma Cells," <i>The Journal of Biological Chemistry</i> , 1980, 255:11660-3 (Exhibit 196)
Probst, M. et al., "Homologous bladder augmentation in dog with the bladder acellular matrix graft," BJU International, 2000, 85:362-71 (Exhibit 197)
Richardson, J. B. et al., "Repair of human articular cartilage after implantation of autologous chondrocytes," The Journal of Bone and Joint Surgery, 1999, 81:1064-8 (Exhibit 198)
Rickard, David J. et al., "Isolation and Characterization of Osteoblast Precursor Cells from Human Bone Marrow," Journal of Bone and Mineral Research, 1996, 11:312-24 (Exhibit 199)
Sarnat, Harvey B. et al., "Neuronal nuclear antigen (NeuN): a marker of neuronal maturation in the early human fetal nervous system," Brain & Development, 1998, 20:88-94 (Exhibit 200)
Scott, Douglas M. et al., "Collagen Synthesis in Cultured Osteoblast-like Cells," Archives of Biochemistry and Biophysics, 1980, 201:384-91 (Exhibit 201)
Shalhoub, Victoria et al., "Downregulation of Cell Growth and Cell Cycle Regulated Genes during Chick Osteoblast Differentiation with the Reciprocal Expression of Histone Gene Variants," <i>Biochemistry</i> , 1989, 28:5318-22 (Exhibit 202)
Siffert, Robert S., "The Role of Alkaline Phosphatase in Osteogenesis," The Journal of Experimental Medicine, 1951, 93:415-26 (Exhibit 203)
Syrjälä, M. et al., "A flow cytometric assay of CD34-postitive cell populations in the bone marrow," British Journal of Haematology, 1994, 88:679-84 (Exhibit 204)
Tacchetti, C. et al., "In Vitro Morphogenesis of Chick Embryo Hypertrophic Cartilage," The Journal of Cell Biology, 1987, 105:999-1006 (Exhibit 205)
Tontonoz, Peter et al., "mPPARy2: tissue-specific regulator of an adipocyte enhancer," Genes & Development, 1994, 8:1224-34 (Exhibit 206)
Trayhum, P. and Margaret Ashwell, "Control of white and brown adipose tissues by the autonomic nervous system," The Proceedings of the Nutrition Society, 1987, 46:135-42 (Exhibit 207)
Vandenburgh, Herman H. and Patricia Karlisch, "Longitudinal Growth of Skeletal Myotubes In Vitro in a New Horizontal Mechanical Cell Stimulator," In Vitro Cellular & Developmental Biology, 1989, 25:607-16 (Exhibit 208)
Wakitani, Shigeyuki et al., "Mesenchymal Cell-Based Repair of Large, Full-Thickness Defects of Articular Cartilage," The Journal of Bone and Joint Surgery, 1994, 76A:579-92 (Exhibit 209)
Wakitani, Shigeyuki et al., "Myogenic Cells Derived from Rat Bone Marrow Mesenchymal Stem Cells Exposed to 5-Azacytidine," Muscle & Nerve, 1995, 18:1417-26 (Exhibit 210)
Weintraub, Harold et al. "Tissue-specific gene activation by MyoD: determination of specificity by cisacting repression elements," Genes & Development, 1994, 8:2203-11 (Exhibit 211)

EXAMINER	DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.			
*Substitute Disclosure Statement Form (PTO-1449)	Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE		

FORM 1449*	Docket Number MA9658 D NJ S	Application Number
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Applicant Fraser et al.	
	Filing Date 7/7/03	Group Art Unit 1632

		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
		Yoo, Jung U. and Brian Johnstone, "The Role of Osteochondral Progenitor Cells in Fracture Repair," Clinical Orthopaedics and Related Research, 1998, 355S:S73-81 (Exhibit 212)
		Young, Henry E. et al., "Human Pluripotent and Progenitor Cells Display Cell Surface Cluster
		Differentiation Markers CD10, CD13, CD56, and MHC Class-I (44365)," Proc. Soc. Exp. Biol. Med., 1999, 221:63-71 (Exhibit 213)
		Zezulak, Kathleen M. and Howard Green, "Specificity of Gene Expression in Adipocytes," Molecular and Cellular Biology, 1985, 5:419-21 (Exhibit 214)
		Zohar, R. et al., "Analysis of intracellular osteopontin as a marker of osteoblastic cell differentiation and mesenchymal cell migration," European Journal of Oral Sciences, 1998, 106(Supp. 1):401-7 (Exhibit 215)
		Zuk, Patricia Z. et al., "Multilineage Cells from Human Adipose Tissue: Implication for Cell-Based Therapies," Tissue Engineering, 2001, 7:211-28 (Exhibit 216)
		•
ļ		
	1	

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is conformance and not considered. Include copy of this form for next	communication to the Applicant.
*Substitute Disclosure Statement Form (PTO-1449)	Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449*	Docket Number MA9658D1US	Application Number
INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Applicant Fraser et al.	
	Filing Date 7/7/03	Group Art Unit /632

U.S. PATENT DOCUMENTS									
EXAMINER INITIAL	DOCUMENT NO.		DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
				<u> </u>			<u></u>		
			FOREIGN	PATENT DOCUMEN	TS				
	DOCUMENT NO.		DATE	COUNTRY	JNTRY CLASS SUBCLASS TR		TRAN	RANSLATION	
							YES	NO	
		OTHE	R DOCUMENTS (Includ	ing Author, Title, Date	, Pertinent Page	s, Etc.)			
	Boskey, et al., 1985, "The Effect of Osteocalcin on In Vitro Lipid-Induced Hydroxyapatite Formation and Seeded Hydroxyapatite Growth," Calc. Tiss. Int. 37:75. (Exhibit 217)								
		Fortier, Lisa, et al., 2000, "Isolation and chondrocytic differentiation of equine bone marrow-derived mesenchymal stem cells," Am. J. Vet. Res. 59:1182-1187. (Exhibit 218)							
		Huibregtse, Barbara, et al., 1998, "Effect of Age and Sampling Site on the Chondro-Osteogenic Potential of Rabbit Marrow-derived Mesenchymal Progenitor Cells," Journal of Orthopaedic Research. 18:18-24. (Exhibit 219)							
	:	Linsenmayer, Thomas et al., 1998, "Type X Collagen: A Hypertrophic Cartilage-Specific Molecule," Pathol. Immunopathol. 7:14-19. (Exhibit 220)							
		Nakajima, I. et al., 1998, "Adipose tissue extracellar matrix: newly organized by adipocytes during differentiation," Differentiation 63:193-200. (Exhibit 221)							
		Zvaifler, et al., 2000, "Mesenchymal precursor cells in the blood of normal individuals," Arthritis Res. 2:477-488. (Exhibit 222)							
		Bond et al., 1999, "Human Subcutaneouspreadipocytes Differentiate Into osteoblasts," FASEB Journal 13:600A (Exhibit 225)							
		Smith et al., 2000, "Mesenchymal Stem Cells Derived From Bone Marrow And Human Adipose Tissue Exhibit Multilineage Potential," Journal of Investigative Medicine, 95A. (Exhibit 226)							
				······					
-									
-									
-									

XAMINER DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FORM 1449°	Docket Number	Application Number
	MA9658DIU 5	10/6/4/64 3
INFORMATION DISCLOSURE STATEMENT	Applicant	
IN AN APPLICATION	Fraser et al.	
	Filing Date	Group Art Unit
(Use several sheets if necessary)	7/7/03	1632

		U.S. PA	TENT DOCUMENTS	3			
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,854,292	December 29, 1998	Ailhaud et al.			1	
		(Exhibit 235)					
		FOREIGN	PATENT DOCUMEN	ITS			
	DOCUMENT NO.	IO. DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 99/28444 (Exhibit 223)	June 10, 1999	PCT				
	WO 99/02654 (Exhibit 224)	January 21, 1999	PCT				
	WO 00/53795 (Exhibit 231)	September 14, 2000	PCT				
·	WO 01/62901 A2 (Exhibit 232)	August 30, 2001	PCT				•
	WO 01/21767 (Exhibit 233)	March 29, 2001	PCT				-
	WO 97/26326 (Exhibit 236)	July 24, 1997	PCT				
	OTHE	R DOCUMENTS (Includi	ng Author, Title, Date	, Pertinent Page	es, Etc.)		
	abdon (Exhil Strutt	Stashower et al., 1999, "Stromal progenitor cells present within liposuction and reduction abdominoplasty fat for autologous transfer to aged skin," Dermatologic Surgery, 25:12:945-949. (Exhibit 227) Strutt et al., 1996, "Growth and differentiation of human adipose stromal cells in culture," methods in Molecular Medicine: Human Cell Culture Protools, 41-51. (Exhibit 228)					
	Tavas	Tavassoli et al., 1981, "The Nature of Fibroblasts Derived From Adipose Tissue In-Vitro," Clinical Research, 29:5:871A. (Exhibit 229)					
	(Exhi	Van et al., 1978, "Complete Differentiation of Adipocyte Precursors," Cell Tissue, 195:317-329. (Exhibit 230) Soda, et al., 1983, "Adipocyte stem cell: A brief review," Int. J. of Cell Cloning, 1:79-84. (Exhibit 234) Ailhaud, et al., 1983, "Hormonal requirements for growth and differentiation of OB17 preadipocyte cells in vitro," Diabete & Metabolisme, Vol. 9:125-133. (Exhibit 237)					
	in vitr						
	25:15	Ailhaud, et al., 1985, "Lipoprotiene lipase et differenciation adipocytaire," Reprod. Nutr. Develop., Vol. 25:153-158. (Exhibit 238) Zuk, Patricia A. et al., "Human Adipose Tissue Is A Source Of Multipotent Stem Cells," Molecular Biology of the Cell, 2002, 13:4279-4295. (Exhibit 239)					
	Biolos						
	(Exhi	Gimble, Jeffery M. et al., "Adipose tissue-derived therapeutics," Expert Opin. Biol., 2003, 3(5)705-713 (Exhibit 240)					
	Saffor	Safford, Kristine M. et al., "Neurogenic differentiation of murine and human adipose-derived stromal cells," Biochemical and Biophysical Research Communications, 2002, 371-379. (Exhibit 241)					

EXAMINE	3	DATE CONSIDERED			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in					
Londormance and not considered. Include conv of this form for next communication to the Applicant.					

conformance and not considered. Include copy of this form for next communication to the Applicant.

*Substitute Disclosure Statement Form (PTO-1449) Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE